

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on December 1, 2009 have been fully considered but they are not persuasive. Applicants argue "the prior art neither disclosed nor suggested forming an adhesion reinforced part for fixing the main body to the substrate by heating and curing the adhesive by sealing the inside of the adhesive with solder part by fusing and solidifying of solder particles contained in the adhesive supplied in the adhesion reinforcing portion causing the adhesive to spread and contact a larger portion of the surface of the main body" (see "Remarks" page 2, 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs). The Examiner disagrees because Abe et al disclose the solder and flux electrically connect the electrodes/terminals of the printed substrate and the chip and the resin encapsulates the solder connection and secures the chip to the printed substrate (see Col. 4, lines 28-39) during soldering chips to the printed substrate. Applicants also argue that "it would be impossible to combine the method described in Abe with the method described in Hatada because there is nothing to prevent the solder from touching the electrodes and causing a short circuit in the electronic component" (see "Remarks" page 4, 2nd paragraph). The Examiner disagrees because Abe et al disclose the resin surrounds the solder thereby prevent the solder from spreading and causing short circuit (see Col. 4, lines 28-33).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,402,013 to Abe et al in view of US Patent 4,749,120 to Hatada and vice versa.

This rejection is set forth in previous Office Action dated 09/01/09, pages 2-4.

4. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe/Hatada or Hatada/Abe as applied above, and further in view of US Patent 6,521,997 to Huang et al.

This rejection is set forth in previous Office Action dated 09/01/09, page 4.

5. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe/Hatada or Hatada/Abe as applied above, and further in view of US Patent 5,726,861 to Ostrem.

This rejection is set forth in previous Office Action dated 09/01/09, page 5.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONGHAI D. NGUYEN whose telephone number is (571)272-4566. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris H. Banks can be reached on (571)-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.